

Work Order ID 80121

February-10-12 11:02:39 AM

Shp 22/02

\*80121\*

Page 1

Item ID: D4353-041

Accept

\*N900040100\*

Setup Start

\*NS1\*

Revision ID: PRELIM

Stop

\*NS2\*

Item Name: Bearpaw Assembly

Start Date: 10/02/2012 Start Qty: 4.00

\*4\*

Cust Item ID:

Required Date: 24/02/2012 Req'd Qty: 4.00

\*4\*

Customer:

Reference:

Approvals: Process Plan: M.C.J.

Date: 12/02/10

Tooling:

Date:

Run Start

\*NR1\*

QC:

Date:

SPC (Y/N):

Date:

Stop

\*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D4353	B

120 0.00

\*120\*

FLOW WATER JET

Waterjet

Memo

0.00

FLOW CNC Waterjet

Cut Blank as per D4353-1 File

12/02/15

12-2-14

4

6

130 0.00

\*130\*

HAAS CNC VERTICAL MACHINING #1

HAAS 1

Memo

0.00

HAAS CNC vertical machine #1

1-Inspect material for defects or damage prior to machining

2-Machine as per FolioFB050 and Dwg

FOLIO REV: 44

DWG REV: B

3-Deburr

12-2-17

4

4

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 80121

**\*80121\***

Page 2

February-10-12 11:02:39 AM

Item ID: D4353-041

Accept

**\*N900040100\***

Setup Start **\*NS1\***

Revision ID: PRELIM

Stop **\*NS2\***

Item Name: Bearpaw Assembly

Start Date: 10/02/2012 Start Qty: 4.00

**\*4\***

Cust Item ID:

Required Date: 24/02/2012 Req'd Qty: 4.00

**\*4\***

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start **\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop **\*NR2\***

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

140

QC2- Inspect parts off machine FAI/FAIB

0.00

**\*140\***

QC

Memo

0.00

Quality Control

150

QC8- Inspect parts - second check

0.00

**\*150\***

QC

Memo

0.00

Quality Control

152

Pick Kit

0.00

**\*152\***

Packaging

Memo

0.00

Packaging

*Handwritten signature and date: 12/22/21*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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NOTE: Date & initial all entries

**Work Order ID 80121****\*80121\***

Page 4

February-10-12 11:02:39 AM

Item ID: D4353-041 Accept **\*N900040100\*** Setup Start **\*NS1\***  
Revision ID: PRELIM Stop **\*NS2\***  
Item Name: Bearpaw Assembly  
Start Date: 10/02/2012 Start Qty: 4.00 **\*4\*** Cust Item ID:  
Required Date: 24/02/2012 Req'd Qty: 4.00 **\*4\*** Customer:  
Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start **\*NR1\***  
QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
190	QC21- Final Inspection - Work Order Release	0.00							
<b>*190*</b>									
QC	Memo	0.00							
Quality Control									

12/2/23 *[Signature]*

*mf*  
12-02-23

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

February-10-12 11:02:43 AM

Page 1

Work Order ID: 80121

\*80121\*

Parent Item: D4353-041

\*D4353-041\*

Parent Item Name: Bearpaw Assembly

Start Date: 10/02/2012

Required Date: 24/02/2012

Start Qty: 4.00

Required Qty: 4.00

Comments: IPP REV:A NEW ISSUE 11-04-12 JLM VERIFIED BY:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

MUHMWB10

Purchased

No

sf

668.5243

20

\*MUHMWB10\*

UHMW 1" Black

\*\*

Location

Loc Qty

Loc Code

MAT018

408.88

120035

88.88

120401

320

MAT019

259.6443158

117321

74.6

117738

95.8

117819

83.3

118814

1.5

119145

4.44431579

D4353-3

Manufactured

No

Each

6.0000

4

\*D4353-3\*

Bearpaw Insert

\*\*

Location

Loc Qty

Loc Code

GA

6

71095

6

18122014

20 20 12/02/15

11738

4 12/02/21

4

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

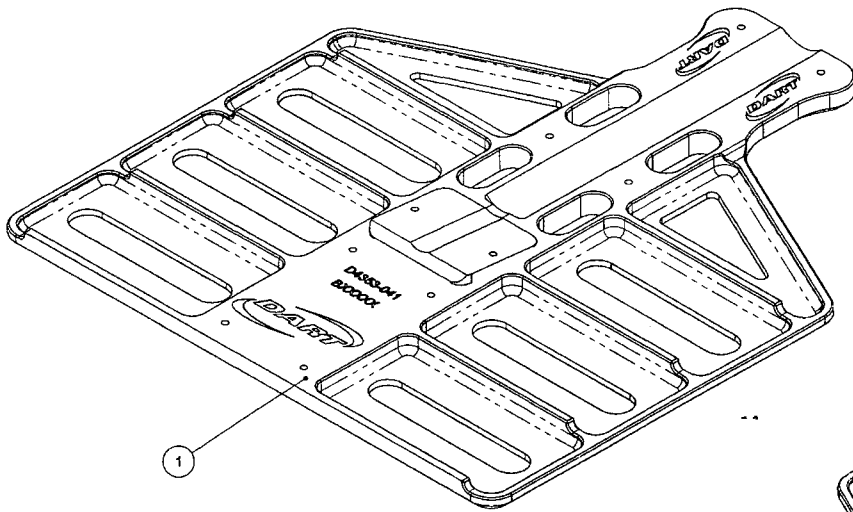
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

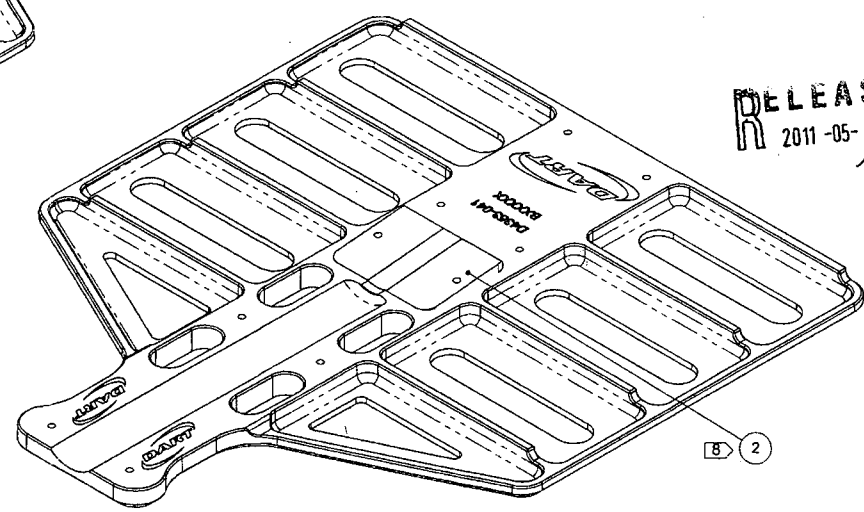


8 7 6 5 4 3 2 1

ITEM	QTY	P/N	DESCRIPTION
	X	D4353-041	429 BEARPAW ASSEMBLY
1	1	D4353-1	429 BEARPAW
2	1	D4353-3	429 BEARPAW INSERT



**D4353-041 429 BEARPAW ASSEMBLY**



**RELEASED**  
2011-05-25

SUP  
M  
E  
UNCO  
SUBJ  
W  
V.C.  
NO 80121 4.C.5  
12/02/10

- NOTES:**
- 1) MATERIAL: N/A
  - 2) FINISH: NONE
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 5) BREAK SHARP EDGES: N/A
  - 6) IDENTIFICATION: N/A
  - 7) WEIGHT: 7.45 lbs
  - 8) PRESS FIT

**B**

B	SHT 1 WEIGHT CORRECTED WAS 8.24 lbs. SHTS 1-3 DART LOGOS UPDATED. SHT 2 ZONE B8, AFT POCKET REDUCED. RIB INCREASED IN HEIGHT. SHT 3 SECTS. B,C & D RIB INCREASED IN HEIGHT.	AJS	11.04.26
A	NEW ISSUE	AJS	11.03.24
REV.	DESCRIPTION	BY	DATE
DESIGN	AJS	<b>DART AEROSPACE LTD</b>	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. B
MFG. APPR.	<i>[Signature]</i>	D4353	SHEET 1 OF 4
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	429 BEARPAW ASSEMBLY	NTS
DATE	11.04.26	<small>COPYRIGHT © 2011 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESSED CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	

8 7 6 5 4 3 2 1

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

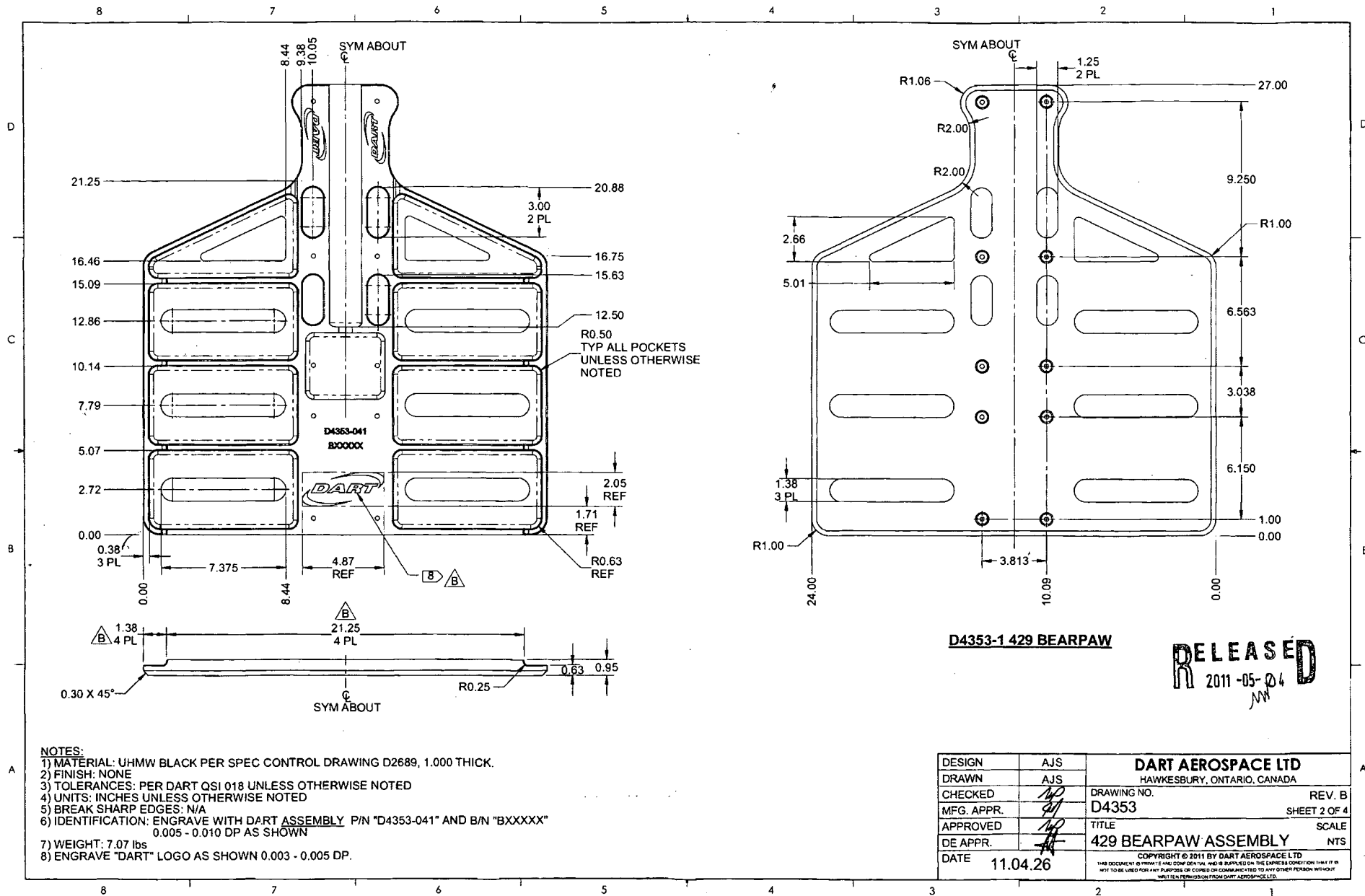
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Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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**NOTE:** Date & initial all entries

80121



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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

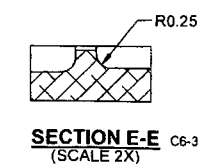
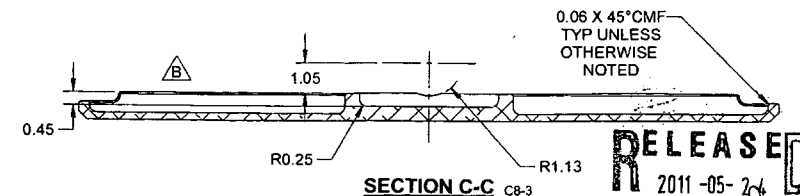
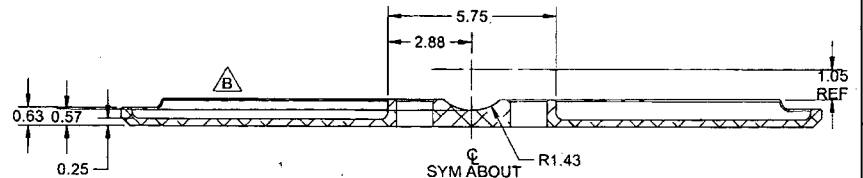
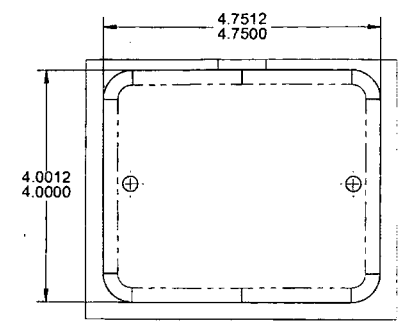
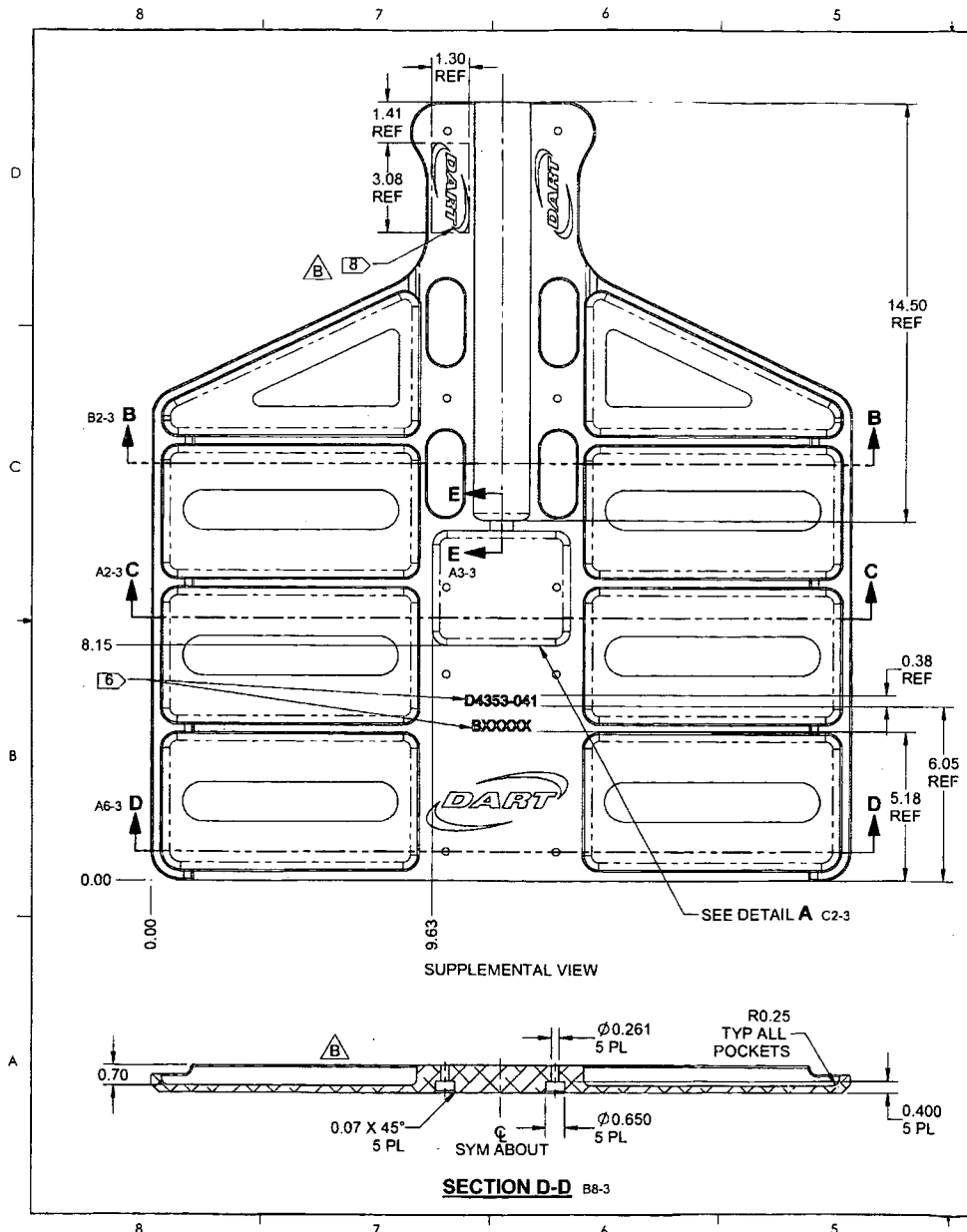
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**NOTE:** Date & initial all entries

80121



DESIGN	AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED	<i>[Signature]</i>	DRAWING NO. D4353	REV. B
MFG. APPR.	<i>[Signature]</i>	SHEET 3 OF 4	
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	429 BEARPAW ASSEMBLY	NTS
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RELEASED  
2011-05-26  
JNT

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

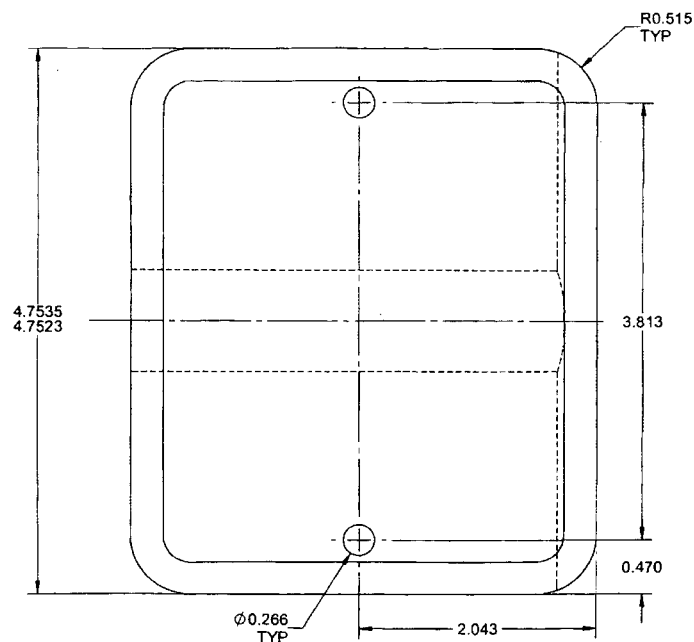
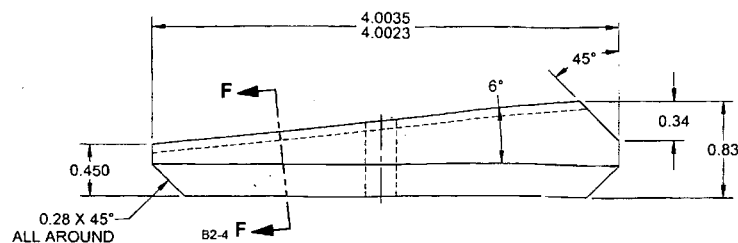
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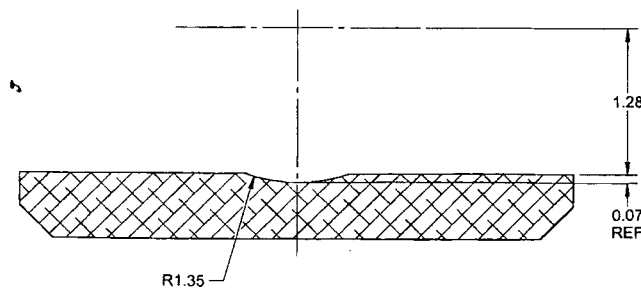
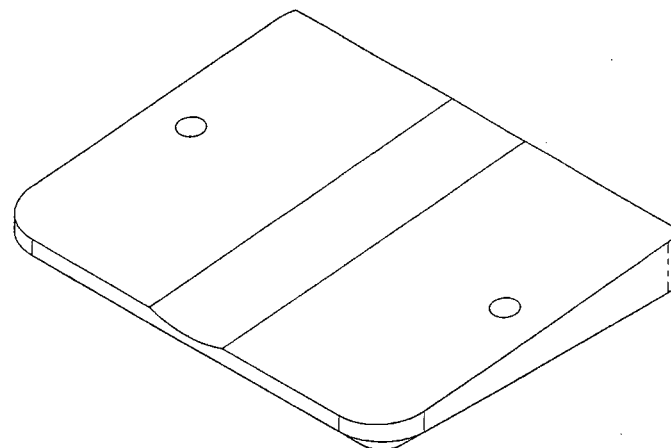
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**NOTE:** Date & initial all entries

80121



**D4353-3 429 BEARPAW INSERT**



**SECTION F-F C7-4**

**NOTES:**

- 1) MATERIAL: UHMW BLACK PER SPEC CONTROL DRAWING D2689, 1.000 THICK.
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.38 lbs

**RELEASED**  
2011-05-26

DESIGN	AJS	<b>DART AEROSPACE LTD</b>	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. B
MFG. APPR.	<i>[Signature]</i>	<b>D4353</b>	SHEET 4 OF 4
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	<b>429 BEARPAW ASSEMBLY</b>	NTS
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**NOTE:** Date & initial all entries





DART AEROSPACE LTD		Work Order: 80121
Description: Bear paw assembly		Part Number: 04353-041
Inspection Dwg: 04353 Rev: B		Page 1 of 1

### FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
0.38	+/- .030	.380	/			
7.375	+/- .010	7.370	/			
12.50	+/- .030	12.50	/			
1.380	+/- .030	1.350	/			
3.813	+/- .010	3.813	/			
24.00	+/- .030	24.0	/			
10.09	+/- .030	10.091	/			
1.00	+/- .030	1.000	/			
6.150	+/- .010	6.150	/			
3.038	+/- .010	3.038	/			
6.563	+/- .010	6.563	/			
9.250	+/- .010	9.250	/			
27.00	+/- .030	27.0	/			
1.25	+/- .030	1.248	/			
0.30 x 45°	+/- .030	0.290	✓			
1.38	+/- .030	1.374	/			
0.63	+/- .030	.638	/			
0.95	+/- .030	.947	/			
R0.25	+/- .030	.25	/			
0.70	+/- .030	.703	/			
0.07 x 45°	+/- .030	0.0685	✓			
Ø 0.650	+/- .010	0.648	✓			
Ø 0.261	+ .006 / - .001	Ø 0.260	✓			

Measured by: <i>[Signature]</i>	Audited by: <i>[Signature]</i>	Preliminary Approval: _____
Date: 12/02/10	Date: 12-02-18	Date: _____

Rev	Date	Change	Revised by	Approved
E	10.04.14	Added preliminary approval	KJ	

*[Signature]* 10.04.15

$$\begin{array}{r} 169.291 \\ \hline 512.3 \\ 070.1 \end{array}$$

$$\begin{array}{r} 000.1 \\ \hline 22.2 \\ 87.9 \\ 11 \end{array}$$

$$\begin{array}{r} 322.5 \\ \hline 102.00 \\ 612.2 \end{array}$$

$$\begin{array}{r} 296.3 \\ \hline 181.1 \\ 977.0 \end{array}$$

$$\begin{array}{r} 261.1 \\ \hline 42.4 \\ 150.1 \\ \hline 782 \end{array}$$